The EZY Launcher

Lazily lift a line to a lofty limb with this little launcher.

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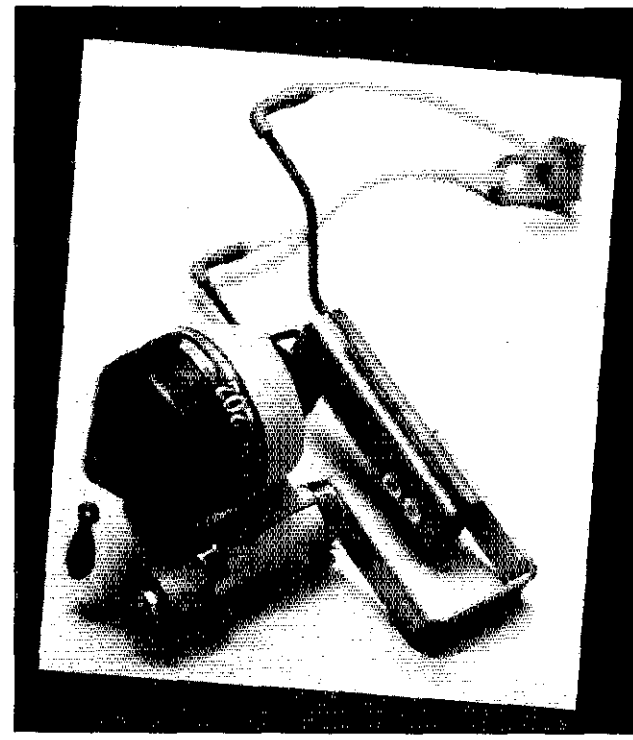


Would you like to raise your 75-meter flattop? Do you get a queasy feeling whenever you consider how you're going to get that nylon rope over that "perfect" limb at 50 feet? Try the EZY Launcher!

The EZY Launcher is made from a Zebco model 202 spin-casting reel (complete with fishing line), a Marksman slingshot, a piece of flat steel stock, a wood dowel, two small hose clamps and some no. 10 hardware. I obtained all the parts at a local hardware store for less than $15. If your hardware store isn't as well stocked, chances are you can get the fishing reel and slingshot from a sporting goods, discount or catalog-sales store. The accompanying photographs show how easy it is to build an EZY Launcher.

Construction

A view of the disassembled EZY Launcher is shown in Fig 1. Table 1 contains the parts list. The U-shaped bracket is formed from a piece of 3/4-inch-wide, 1/8-inch-thick steel (or aluminum). Each leg is approximately 2-3/4 inches long, with a 1-3/4 inch gap between the legs. Adjust this gap to comfortably fit your hand and allow your thumb to operate the fishing reel's release button at the rear. To determine the gap width, grasp the slingshot in your shooting hand. Measure the distance from the side of the slingshot handle nearest you to the second knuckle of the middle finger of your shooting hand; to this dimension, add about 1/8 to 1/4 inch. Cut the metal stock long enough to allow for the leg lengths, the bracket's horizontal portion and the bends at each leg. Using a vise, bend the flat stock at the required gap distance to make the horizontal part of the bracket. Then, cut the legs to length.

Drill two 3/16-inch-diameter holes at the top of one of the bracket legs on the centerline. Locate the first hole 3/8 inch from the top of the leg. Make the second hole 1/2 inch down from the first hole. Deburr the holes and countersink them on the outside of the bracket. Drill a single 3/16-inch-diameter hole 3/8 inch down from the top of the other leg on its centerline. Deburr the hole and remove any sharp edges from the bracket.

Place the slingshot against the bracket and check for grip clearance. Drill two mounting holes in the slingshot handle. Position the first hole 3/8 inch up from the bottom of the wooden part of the handle on its centerline. Locate the second hole 1/2 inch from the first. These holes should line up exactly with the holes in the bracket. Attach the slingshot to the inside of the bracket using two no. 10 1-inch-long flathead machine screws. To keep the screw ends flush with the nuts, I used no washers beneath the nuts.

Drill a 3/16-inch-diameter hole lengthwise through the center of a 3-inch-long dowel. A drill press comes in handy here, but a satisfactory job can be done with an electric hand drill and reasonable care. Use a 3-1/2-inch-long no. 10 machine screw to attach the dowel to the bracket leg opposite the slingshot. The bolt head should be inside the bracket. Secure the dowel using a no. 10 flat washer and nut.

Attach the fishing reel to the dowel using two small hose clamps. Grip the slingshot

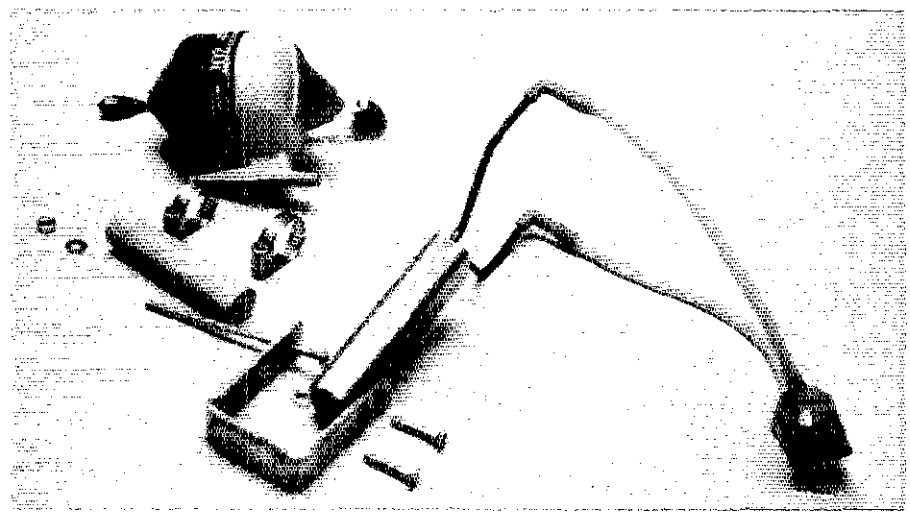


Fig 1—A view of the disassembled EZY Launcher.

Table 1
Parts List

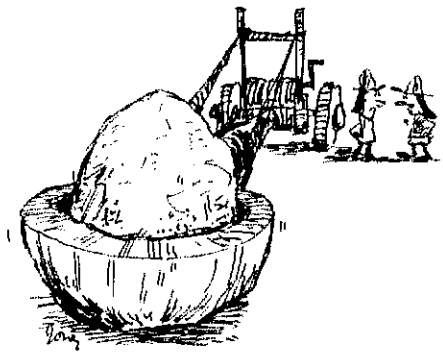
Qty	Item
1	Zebco model 202 spin-casting reel (or equivalent)
1	Marksman Co model 3010 slingshot (or equivalent)
1	1/8 × 3/4 × 12-inch piece of flat steel (or aluminum) stock
1	3/4- × 3-inch hardwood dowel
2	3/4-inch hose clamps
2	No. 10 × 1-inch flat-head machine screws
1	No. 10 × 3-1/2-inch round-head machine screw
3	No. 10 nuts
1	No. 10 flat washer
1	No. 10 lock nut
1	1/2-oz sinker

and rotate the dowel until your thumb can rest comfortably on the release button. Slide the reel forward or backward if necessary.

Operation

Safety First!

Remember: A slingshot is not a toy! Wear eye protection and take any other precautions necessary to ensure the safety of people and property. Never shoot near power lines. Practice shooting in a flat, open area until you're confident in your ability to shoot predictably.



What do you mean, storm the castle... I thought we were going to launch my dipole!

Remove the metal ring at the end of the fishing line. Make a 1-inch loop of line at the end. Carefully deburr the eye of a 1/2-oz sinker. Push the line loop through the sinker eye, pass the loop around the sinker body and pull it tight. This method of fastening the sinker to the line makes it easier to get the sinker off the line and provides a means of connecting light nylon line once the sinker has passed over the tree limb and returned to ground. (Please have regard for the trees. Doug [W3AS] Brede's article[1] is recommended reading.—*Ed.*)

When you're ready to shoot, wind the sinker tightly against the reel. Make sure that the reel crank is down and out of the way of the shot. If it isn't, press the release button while holding the sinker in place with your free hand, and wind the crank until the sinker is tight against the reel and the crank is down. Position the sinker in the pouch with the sinker eye pointing down. Take short shots until you get the feel of the Launcher. Control the shot distance with the release button. The button not only releases the line for casting, it also acts as a brake when depressed further. You can set the degree of drag by adjusting the black adjustment wheel on top of the reel. When rewinding the line, apply a small amount of drag to it using your thumb and forefinger.

That's it! Have fun with the EZY Launcher. It's sure to make your antenna-raising easy.

[1]D. Brede, "The Care and Feeding of an Amateur's Favorite Antenna Support—the Tree," *QST*, Sep 1989, pp 26-28 and 40.

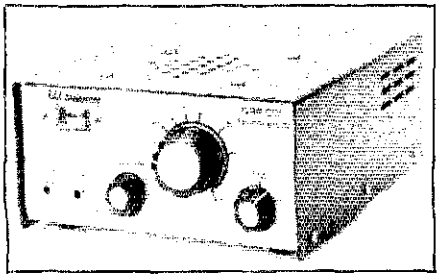
Wade Calvert was first licensed as WA9EZY in 1962 and holds an Extra Class license. He has a BSEE degree from the University of Iowa. After spending 21 years in the electric utilities industry, Wade now owns and runs Calvert Electronic Systems, where he's engaged in the design and manufacture of professional audio recording and testing equipment. Wade's interests include DXing, ragchewing, homebrewing amateur gear, songwriting and music production.

New Products

The ARRL and QST *in no way warrant products described under the New Products banner.*

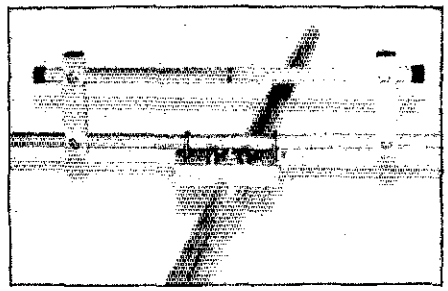
QRP TRANSCEIVERS

☐ The portable QRP transceiver designed by Gary Breed, K9AY (see *QST*, Dec '90, p 44, and Jan '91, p 17), is available as a kit that includes parts, circuit boards, wire, hardware, speaker, knobs, case and front panel. All you add is a battery, CW key and antenna. The completed transceiver measures 6 × 7.25 × 3 inches and weighs less than two pounds. Models are available for 20 meters (model no. 180-K20), 40 meters (no. 180-K40) and 30 meters (no. 180-K30). Each costs $159.95 plus $5 s/h. A&A Engineering, 2521 W LaPalma #K, Anaheim, CA 92801; tel 714-952-2114, fax 714-952-3280.



ANTENNA FEED SYSTEM

☐ The Balanced Double Gamma Feed features a natural balun that supplies both sides of a grounded driven element with equal power, regardless of frequency, through a rectangular loop at its electrical and mechanical center. The manufacturer claims low SWR bandwidth in its monoband HF, VHF and UHF Yagis, high gain, an optimum radiation pattern and improved impedance matching. Retail prices range from $50-395. Ham-Pro Antennas, a division of Kopps Corp, 7449 Fox Hills Dr, Citrus Heights, CA 95610, tel 800-879-7569.



New Books

COLLINS BOOKS

☐ Instruction books for the Rockwell/Collins models 30L-1 and 30S-1 linear amplifiers are available, complementing seven other books on S-line and KWM equipment authorized by an agreement between Rockwell/Collins and Vista Technology. The 30L-1 book is published from the 8th Edition and costs $25. The 30S-1 book is published from the 12th edition and sells for $30. Vista Technology Inc, 3041 Rising Springs Ct, Bellbrook, OH 45305; tel 513-426-6700.